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POWER, KNOWLEDGE AND MANAGEMENT INFORMATION SYSTEMS EDUCATION: THE CASE OF THE INDIAN LEARNER

IT for Underserved Communities

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Abstract

This paper considers the challenges that arise for Indian students who undertake postgraduate Management Information Systems programmes outside India. We discuss how the educational practices in India differ from those that are required by MIS postgraduate programmes in the UK. Drawing on empirical work that has been conducted in India between November 2005 and January 2006, we highlight some of the key features of the Indian undergraduate education experience before suggesting that these are in contrast to those that Indian students encounter while studying at the postgraduate level in the UK. We argue that MIS programmes also pose significant challenges due to the diverse subject matter that is typically taught and assessed. Drawing on the work of Michel Foucault, we argue that education processes in both India and the UK are inextricably interlinked to claims about what constitutes legitimate knowledge and the practices that produce and reproduce such claims. Suggestions for change to MIS programmes derive from our analysis.

Keywords: MIS programmes, Indian learner, international students, power, knowledge, truth, Foucault

Introduction

In an era of increasing globalization, the makeup of students studying management information systems (MIS) is becoming increasingly international, especially at the postgraduate level. There is little published research, however, that seeks to identify the challenges faced by students who have an undergraduate education from one country and then join a postgraduate MIS degree in another. Making such a transition raises a host of potential problems, including pastoral, cultural and welfare issues. Many students also face problems of very differing undergraduate and postgraduate education regimes. In some cases, these problems of differing academic expectations become visible in allegations of plagiarism and other academic malpractice.

This paper reports on research undertaken as part of a three-year, government funded project studying international students coming to study information systems, business and management topics in the United Kingdom. According to UKCOSA (the (UK) Council for International Education) international students make up approximately 37% of taught postgraduate students in the UK, with 22% of these studying business and management topics (UKCOSA, 2004). The project focuses on the three countries that send large numbers of students to the UK: China, Greece and India. This paper reports on an aspect of this project relating to the experiences of the Indian learner.

After reviewing some of the existing literature about international students and their educational experiences, the paper describes the empirical fieldwork undertaken to understand better the educational experiences of Indian learners within the context of the Indian higher education system. The paper suggests that, following Foucault, the institutions and practices of Indian education have particular ‘disciplining’ effects on Indian learners that shapes and determines their adjustment to MIS education in countries like the UK. This claim is illustrated by drawing on two themes that we observed in the fieldwork data, namely the expectations that Indian students have for various forms of support during their education and the role of institutional arrangements on the form of their education. The paper then contrasts these two themes with those found in MIS curricula in the UK and elsewhere, as typified by the AIS postgraduate model curriculum. The paper ends with a discussion of the implications of this research for MIS programmes with increasing numbers of international students, not just those from India.

Previous Research on Differing Educational Experiences

Research on the experience of ‘international’ students can be found in a diverse literature, including subject specific literature (“the experiences of international students studying subject X”), that on educational practices and pedagogy and discussions about support for non-native language speakers. Amongst the key themes in this literature are the kinds of educational resources used for teaching, differing assessment practices, broader differences in ethical approaches and the role of (second) languages for learning. We briefly review some of the key themes in this section.

A prominent concern for international students relates to their reliance on one textbook for the teaching, learning and assessment of a particular course (Hayes and Introna, 2005b). Authors argue that this results in students not being educated as to how to evaluate different findings and perspectives and then utilize them in their own argument about a particular problem or issue (Hayes and Introna, 2005a; Pennycook, 1996). In addition to the authority that the textbook is claimed to have in the classroom, some authors have pointed to the power structures between teachers and students as discouraging critical evaluation. For example, Turner (2000) claims that the authority of the teacher and the subservience of the student is a commonplace value in the Chinese educational context and is evident in the fact that students are rarely asked questions and do not ask questions themselves during classes. She found that if questions are posed, they only require factual responses and not opinions or justified arguments. She further claims that students are not encouraged to take notes other than exact copies of what is written on the board.

Other commentators have highlighted the role of assessment practices. In countries such as China and India assessment is largely exam based which can cause problems when adjusting to an education system that requires students to be assessed through project work such as reports, presentations and essays, at least initially (Ashworth, et al., 1997; Carroll and Appleton, 2001). The anxieties that can arise from such challenges are often heightened by the pressures that many students feel to do well, either due to their limited employment prospects in their home country or due to the high expectations of their family or company sponsor (Bond, 1986; O’Donoghue, 1996).

There is literature that has examined the difficulties and challenges that international students as a whole face when studying in the UK and USA. For many international students language is one of the central issues with reading and writing in a second language (English) clearly affecting their educational experience. As is detailed below, English is the main language of instruction in India however, if students have limited experience of writing essays in English, having to do that in the UK can nevertheless pose real problems. Indeed, the language of instruction is frequently equated with some kind of fluency or knowledge of the assessment system—which often isn’t there. As a result, students who do speak English may miss out on relevant preparatory courses which are often solely targeted at non-native speakers but which nevertheless convey important information about the expectations of the assessment methods used.

Data Collection: Methodology, Sample and Bias

Having previously undertaken a number of focus groups with students from India who are currently studying MIS in the UK, most of the data presented here is based on an extended fieldwork visit to India that took place between November 2005 and January 2006. The visit was focused on higher education colleges and universities that teach students some of whom may continue their education abroad, specifically in MIS, business and management studies.

In selecting institutions to visit, we drew on the results from the focus groups and consulted colleagues and alumni to identify the best-known Indian institutions that had traditionally sent students to the UK. We also reviewed the educational backgrounds of current Indian students. In addition, we studied various published rankings of the Indian higher education sector.

Most of the colleges, universities and institutes that we visited have a national and international profile and many are in the national or regional top ten. We visited the prestigious Indian Institutes of Technology and Indian Institutes of Management many of whose undergraduates tend to start working for leading companies, stay on for their masters degrees at the same institutions or move on to Ivy League American universities (MIT in particular) after completing their degrees. Apart from the major cities of Delhi, Mumbai and Chennai we also visited Pune and Lucknow, which have well established universities. Both public and privately funded establishments were visited. Although we also tried to identify (and gain access to) some institutions that would not ordinarily fit into this top grouping, so as to better understand the salient differences between elite colleges and others, our data predominantly reflects a particularly international and high-end segment of the education market.

All conversations with Indian students and academics were held in English, which is the language of higher education in that country. There are some colleges that teach in regional vernaculars (there are over 300 dialects and languages spoken in India), but the vast majority of tertiary level students will have been taught in English throughout their school careers. Textbooks and other teaching materials in India are normally provided in English.

Prior to going to India we contacted the higher education institutions by letter, which was followed up by email or telephone to set up appointments. In total we contacted 34 institutions although not all institutions replied and in some cases it was not possible to find a mutually agreeable time to visit.

In total we visited 18 institutions. The team spent 11 person weeks in India. The lead researcher stayed six-and-a-half consecutive weeks and was joined by two other team members, one who came to Mumbai and the other traveling to Delhi. The length and intensity of the visits to the colleges varied considerably. In some cases we were able to make repeat visits, spending several days talking to the various departments and sections within the colleges and meeting different groups of students. Elsewhere we spent half a day at the university and in isolated cases only a few hours.

In our initial requests to the principals we asked to spend some time meeting them and other faculty members, to sit in on lectures (preferably a core course) and talk to a group of students (ideally in their final year). In each visit we made it very clear that our aim was not to recruit students, but that we were involved in a British government sponsored project (via the Higher Education Funding Council for England—HEFCE) that aims to develop resources that will help international students prepare for studying in the UK as well as helping faculty in Britain to better understand the diversity in their class rooms. At each institution we tried to spend some time to get a feel for the place and its surroundings, e.g. we asked to see the library and computer facilities and asked the locals where to go and eat, etc.

Our approach was informed by previous research experiences in educational settings conducted by the lead researcher (Timm, 2003) and similar to that described by Agar (1996). Throughout the fieldwork period we were opportunistic in our attempts to gain insights into the lives of students and university staff members. For example, we tried to stay close to the campus (sometimes in student or staff hostels), arrived early and stayed on after the official visits were over, drinking tea in local stalls, eating in the canteen, using local internet connections and photocopying shops etc. Each time we were hoping to meet people and talk to them, however briefly.

We collected and photographed flyers, advertisements and graffiti and used these for elicitation purposes. Our aim was to try and understand not only how the system works but also the role of unofficial educational practices (tutoring, guide books, etc.) that might not be brought up during our formal visits to the colleges. We collected samples and research materials such as college prospectuses, exam papers and student newspapers. Mainstream newspapers also provided a running commentary of the ongoing (and sometimes heated) debates about the state of the Indian education system.

Occasionally we were able to attend lectures and classes and, whilst these are not representative of Indian education as a whole, they enabled us to observe the kinds of things that had been mentioned by students in focus groups and faculty.

The research methods consisted of semi-structured interviews (with principals, faculty and other staff members) and focus groups with faculty and students (though normally not at the same time). For these we had interview agendas that had been piloted during an earlier visit to Greece. In this paper we do not associate particular comments with individuals or specific institutions. This is not because the participants were particularly concerned with issues of anonymity, but rather because we felt that, for the integrity of the project, it was important to promise and grant this to everyone.

Analysis of the data was done in a variety of ways. We met frequently both in India and back in the UK to discuss our experiences and findings. This enabled us to get a good sense of common themes and experiences of Indian education, in particular noting the ways in which they differed from typical experiences in the UK. Following this initial review, more detailed analysis was undertaken with the authors listening to recordings of the interviews and focus groups and studying field notes, highlighting key elements, both that illustrated the outline themes that had been observed and aspects that had not yet emerged as key themes.

We believe that it is important to provide some kind of understanding of the context in which we collected the data and so, in the next section, we provide an overview of Indian Higher Education.

University Education in India

Higher education (HE) in India predates the colonial period by several centuries. This system, however, was not recognized under British rule, which considered it to be based on prejudice and superstition. In the early 19th century TB Macaulay (1800–1859) successfully argued that, for the ‘improvement of the natives’, education with a Western style and content ought to be introduced on the subcontinent. He particularly stressed the need for empirical science and for English to be used as the medium of instruction. The intention was to create an educated elite capable and willing to appreciate the superiority of the British and to work for the greater good of the empire. The oldest Indian universities were modeled on the University of London and were established in 1857 in Calcutta, Madras and Bombay. In accordance with this model and its operation at the time, the universities acted as examining bodies, i.e., the teaching itself took place through the affiliated colleges. In the 1950s India had 30 universities, 600 colleges and 170,000 students. Since then it has experienced dramatic expansion.

A national system of education was being formulated in the independence period in the mid 1940s. The University Grants Commission (UGC) became the governing body responsible for higher education funding, coordination and the development and maintenance of standards. At present national and state governments share responsibility for higher education (Department of Secondary and Higher Education, 2006):

- The national government (through the Ministry of Human Resource Development) is responsible for major HE policy and funds the UGC. It also funds and maintains the so called Central Universities (of which there are at present 18).
- State governments also have the right to establish and run their own universities in cooperation with the UGC. At present there are 211 State Universities, for example, the University of Mumbai and the University of Pune are funded by the State of Maharashtra.
- The most rapidly growing institutions, however, are the privately-run Deemed Universities. To date some 95 such organisations have been granted autonomy. They are in charge of their own admissions policies, coursework and syllabus. They also set their own fee levels (Gupta, 2004).

In recent years the HE sector in India has undergone rapid growth. Student numbers are expanding in line with economic development and greater prosperity. Thus, by the end of March 2005 there were 342 universities and 17,625 colleges, with 10,481,000 students registered (up from 9,954,000 in the previous year) (Department of Secondary and Higher Education, 2006). Nevertheless, this represents an overall participation rate of only 7% of the population in the relevant age group. As a result, the education sector as a whole is facing problems of inadequate participation (by international standards) whilst also facing the inevitable problems caused by too rapid expansion to try to provide the necessary capacity.

Given that many children in India remain excluded from even basic education it is unsurprising that the government is concentrating its efforts and expenditure on primary education (Department of School Education and Literacy, 2006). However, this concentration of funds and initiatives elsewhere has left higher education neglected and exposed at the very point where demand has been rapidly expanding. During the 1990s Indian government expenditure on higher education (per student) has been drastically reduced (Tilak, 2002) and privatization appears to have happened ‘by default’ (Kapu and Mehta, 2004). In our conversations, faculty members and university administrators appeared skeptical and worried about this trend and those involved in student politics appear to agree; we saw plenty of graffiti protesting against commercialization of higher education.

As a result, “the universities that constitute the backbone of the system have been stretched, their standards of teaching and of evaluation compromised in order to accommodate demand. As a consequence, education at Indian universities has deteriorated into an examination–driven, certificate–oriented exercise” (Chitnis, 2002).

The low enrolment rates throughout the education sector and especially by the university level make it important to bear in mind that those who make it into universities at all are very privileged indeed. Another major issue relates to the participation of women and minorities in any form of education. Women make up only 40% of enrolled students. Huge inequalities persist, despite earnest attempts to remedy the situation by means of educational policies, quotas and grants. Reactions to these governmental provisions have at times been extremely violent, e.g. repeatedly students have committed suicide by burning themselves in protest to new laws and regulations of this type.

The vast majority of students enter university straight after leaving secondary school with a Senior School Certificate (awarded after 10+2 years of education). The last two years of pre–university study commonly represent some form of specialization and may be taken at junior colleges that are already affiliated to specific undergraduate colleges.

In the Indian context it is important to briefly explain the existence and role of Indian Institutes of Technology (IITs) and the Indian Institutes of Management (IIMs), which are federally funded and recognized to be of world standard. IITs and IIMs are autonomous institutions that are considered to be of national importance. As such they receive state funding well above that which is available to other HE institutions. Faculty commonly received their PhDs from top American schools and there are closer links between the institutes and industry than is otherwise common in India.

Power/Knowledge and Legitimate Education Practices

It is apparent from the very brief description of India and the Indian education system given in the previous section, that there is incredible diversity within India and that it is not possible to provide a single ‘model’ of the educational experience of students coming from India. This is a common problem to information systems researchers studying situated work practices (e.g. Ciborra, 2002; Suchman, 1987). Mol and Law (2002) describe this issue succinctly: “simplifications that reduce a complex reality to whatever it is that fits into a simple scheme tend to ‘forget’ about the complex, which may mean that the latter is surprising and disturbing when it reappears later on and, in extreme cases, is simply repressed” (p. 3).

From this perspective, a key issue becomes one of our need for representativeness (and, conversely, generalisability (Lee and Baskerville, 2003)). We argue, therefore, that our evidence about education in India is not (and cannot be) representative of something larger — into which it neatly fits. Instead, we must “take all cases as phenomena in their own right, each differing slightly in some (unexpected) way from all the others. Thus a case may still be instructive beyond its specific site and situation and this tends to be why it is studied, but the lessons it holds always come with the condition that, elsewhere, in other cases, what is similar and different is not to be taken for granted. It remains to be seen, to be experienced, to be investigated” (Mol and Law, 2002 p. 15).

Nevertheless, experience of interacting with students who have previously studied in India and detailed evidence from our focus groups, strongly suggests that there are some things that are fairly typical of the Indian educational experience and that these are distinctive in comparison to the UK educational process, that all the authors have experienced. These distinctive things could be described in the philosophical language of Ludwig Wittgenstein as a ‘form of life’ (Wittgenstein, 1956). However, in this paper we wish to suggest that the Indian educational experience is more than this and, following Foucault (1977), suggest that educational discourse has distinct

‘disciplining’ characteristics which strongly shape the experience and expectations of students coming from India to study in the UK and that may help explain some of the issues of adjustment that these students face.

For Foucault, human institutions like schools are directly implicated in the production and circulation of knowledge claims and, as such, make any attempts to separate power and knowledge futile as the production of knowledge is political all the way down (Foucault, 1979). In particular, these formal and informal social structures have the effect of ‘disciplining’ and shaping actions and expectations. Foucault’s careful linking of the concepts of power and knowledge is a complex, sophisticated argument that is difficult to present succinctly. These ideas have been applied in information systems by a number of researchers (e.g. Brooke, 2002; McGrath, 2003; Zuboff, 1988).

Introna and Whittaker (2004), following Foucault (1977), suggest a number of concrete mechanisms and practices by which this disciplining can take place. For example, they point to the *mechanisms and instances* that enable one to distinguish true and false statements. In the institution of science this is normally the mechanisms of scientific argument and proof. They also discuss the *status of those who are charged* with saying what counts as true. In institutions, the charge of acknowledging knowledge claims is carefully distributed and controlled. In academic research, for example, reviewers must be recognized experts in their field and editors must be seen to acting on behalf of the community (Introna and Whittaker, 2004 p. 105). In this paper we present empirical data that suggests the existence of such mechanisms for the Indian learner.

Observed Indian Educational Practices

In this section, we present examples of observed Indian educational practices that relate to these issues of power/knowledge and ‘disciplining’. We focus on two particular aspects of our fieldwork data which struck all of us as being particularly distinctive and different from the equivalent UK experience. These particular themes emerged in our initial focus group discussions with students and were then explored in more detail during the field visit as described above. Once again, Mol and Law provide useful guidance about the process of extracting and presenting these themes from our initial reading of the data: “The texts that carry academic stories tend to organize phenomena bewildering in their layered complexity into clean overviews. They make smooth schemes that are more or less linear, with a demonstrative or an argumentative logic in which each event follows the one that came before. What may originally have been surprising is explained and is therefore no longer surprising or disturbing. Academic texts may talk about strange things, but their tone is almost always calm” (Mol and Law, 2002 p. 3).

Bearing in mind this advice, the first aspect relates to students’ experience and expectation of support whilst the second relates to the institutional arrangements of university undergraduate education.

Support

As was previously indicated, Indian education is a vast enterprise. This means that for the top colleges entrance is highly competitive and cut-off points are used. For example, the most prestigious colleges in Delhi will only accept students in the top 15% of the cohort. Applicants belonging to a scheduled caste or scheduled tribe can apply in various reserved categories and this usually means that requirements are lower and remedial classes are frequently offered to these students to ensure that they can keep up. The issues of equality of opportunity, access and reservation are key areas of research in the Indian context, not just in higher education and were found extensively in our data, even if they are not reported fully here.

Entrance to the IITs at undergraduate level is similarly highly selective (it is reported that only one in 40 of the 200,000 applicants is successful (Guardian, 2006)) and is governed by the Joint Entrance Exam (IIT-JEE) that tests applicants in maths, physics and chemistry. Students commonly prepare for the entrance exams over a period of two years undergoing a grueling coaching schedule in addition to their ordinary school attendance (as the school syllabus and entrance tests do not cover the same material). Because it has become almost impossible to gain entrance without this expensive type of coaching — and because this allows only for a particular type of student to be successful — the admissions process is currently being reformed.

The IIMs only offer graduate training; their Postgraduate Diploma in Management is the most desirable MBA on offer. Admission is regulated through the Common Admission Test (CAT) that determines entry for all the IIMs. For the most prestigious institution, the IIM Ahmedabad, the ratio of applicants to places is 700:1. This makes it considerably more competitive than many of the top American business schools (for example, at Stanford it is 13:1)

(Chakrawerti, 2005). With fee levels as low as US\$3,000 it is unsurprising to find that in 2005 as many as 175,000 students applied.

Some other colleges rely on marks and rankings from the CAT and JEE (with lower cut-off points), on their own college entrance exams, on interviews or the School leaving certificate. When the marks for the entrance exams become available, students begin the process of selecting their university on the basis of their ranking and the entrance requirements of the different institutions.

One direct consequence of the competitive entrance examinations for some of top institutions has been the emergence over the past 15–20 years of coaching schools that are designed to prepare students for the entrance examinations. The students enter the coaching schools during the last two years of their high school education and are given extensive coaching in preparation for the entrance exams.

A number of important consequences arise from the existence of these coaching schools. First, all the students that we met at schools that based their admission on competitive entrance examinations had been through the coaching process. Second, since the goal of the coaching school was to prepare the students so that they could achieve their goal of admission to the leading universities, the style of coaching was very much examination focused, with students doing whatever was necessary to play the game so that they could be admitted to the best schools. This meant that much of the focus was on rote learning rather than broad learning, something that was rued by a number of the academics we met. However, until alternative criteria are available for selecting the very best students from such a large pool each year, competitive entrance examinations are likely to remain a significant element for many students for years to come even if some changes to the form of assessment have been proposed (Rediff, 2005; The Hindu, 2005).

‘Coaching’ was also prevalent throughout Indian undergraduate degree programmes and was frequently reported by students and faculty. During the field visit, we even saw this in practice. For example, in a two-hour lecture one of the authors attended at a prestigious college, it became evident that the lecturer was going through a series of previous exam questions. He asked students to write down word for word a question from a previous year’s exam and then sometimes told them to stop writing. He then explained specific details about the issue in question before instructing the students to copy word for word the model answer that he articulated. Often, he would not tell them when to pick up and put down their pens, but students would uniformly do this at the moment he started articulating a question and model answer and put them down when he had finished indicating how deeply embedded such practices are.

Another particularly distinctive feature of the Indian educational experience, which we found at all levels of the sector, was the particularly close relationship many (though not all) students had with the staff.

We had first learned of the special relationships that students had with their tutors during the focus groups before the field work, however, the central role that these relationships played in their university experience (both educationally and in terms of extra curricular activities) did not become apparent until we visited colleges campuses in India.

In India, we found some staff lived on campus and both students and staff reported that it was reasonable and normal for students to approach faculty after lectures and in their offices during the day and at their homes on campus during the evening. None of our respondents found this practice in any way unusual: availability was normal. As an illustration of an even closer relationship we noticed that on a number of occasions when local students (who were often friends of students studying in the UK) were coordinating university visits, they would contact the staff we were due to meet on their mobile phones (rather than their office telephones) if timings needed to be rescheduled. Likewise, college lecturers would arrange focus groups for us simply by calling one or two influential students, rather than approaching departmental administrators or other lecturers. The existence of these direct lines of communication was apparent although it is hard to say whether this applied to all students or just to those with special relationships to their lecturers.

One student currently studying in the UK for a Masters degree asked a former classmate still in India to help out with some research on a topic that they had already covered during their undergraduate degree. The friend in India then went to visit their former lecturer to ask for some help on behalf of the student in the UK. They reported that help was willingly provided, on the spot.

Academic support of this nature was also widely available to students in the form of coaches who would provide supplementary teaching support. Advertisements seeking people to act as tutors, as well as advertising tutorial services were frequently found around university campuses.

Institutional Arrangements

Government funded universities also have distinctive features. Of particular note is the institutional arrangements found in large universities such as Delhi and Mumbai. These universities are made up of large numbers of colleges, often (though not always) closely physically co-located, for example, in the North Campus of Delhi University many of the colleges occupied a single block in the university area. Many of these colleges have their own distinctive reputation and features. For example, in Delhi University Lady Shri Ram College is a women-only undergraduate college with a strong international reputation for its courses in Commerce. It was established in 1956. St Stephens College also has a similar if not better international reputation but teaches men and women in arts and sciences at undergraduate level. It is also a Christian College and the oldest one in Delhi having been established in 1881.

Many of the big universities, such as Mumbai, are affiliating bodies, which prescribe to their affiliated colleges the course of study through a centralized syllabus. One of the original drivers behind the affiliating system was the introduction and maintenance of standards: since nobody knows who is marking what or whom, this has been achieved—it is fair, at least in theory—and it would be almost impossible to find the particular lecturer in order to bribe them.

The university also holds the examinations and awards the degrees. By its own admission, the Department of Secondary and Higher Education considers these institutions now ‘unmanageable’ (Department of Secondary and Higher Education, 2006), chiefly on account of the enormous growth in the sector and the bureaucracy involved. Apparently,

“The affiliating university has aptly been described by the well-known educationist, Suma Chitnis, as a ‘minimum demands system’ for all the constituencies involved: students, teachers, administrators and government officials. As such, it creates powerful vested interests that resist change. This progressively alienates the university and its colleges from changing social realities and needs. In the post-Independence period this is glaringly apparent.” (Heredia, 1996)

The degree structure in India was modeled on the British system. A Bachelor’s degree takes three years in most subjects (although four in engineering and other professional subjects and five in medicine and architecture are prescribed). A Master’s degree generally takes two years. However, in India it does not necessarily involve writing a thesis or research paper. Demand for this qualification is rising. It is also very popular among Indian students to pursue an MBA straight after finishing their undergraduate degree. The vast majority of students undertake undergraduate and graduate studies full-time. PhDs are relatively rare and at many colleges faculty members do not commonly hold these.

As part of a slow and ongoing reform process, some responsibilities have been devolved to colleges since the mid-1980s. However, only 138 colleges have so far applied to become autonomous colleges. These establishments are in charge of their own course development and marking. In turn their name is included in the degree certificate that continues to be awarded by the university. It should be noted that autonomous status does not indicate financial and / or administrative independence from the university. The committees that formulate the exams were explained to us to be large and there are few incentives and opportunities for change. Teacher training is often focused on subject knowledge rather than pedagogy and there is limited opportunity for many academics to do their own research and present it at national level. As such, modernizing the form of examination, or even recommending alternative textbooks was said to be extremely difficult.

Since college autonomy offers more scope for innovation in terms of the syllabus and teaching and assessment methods it appears to be the way forward for many Indian HE institutions. However, there are relatively few incentives for faculty: despite potentially doing a lot more work — e.g. designing new syllabi, setting coursework rather than relying on exams and hence having to do more marking etc. — salaries and development opportunities remain limited (although some exist at an institutional level). University lecturers are well organised and their unions are related to political parties (George and Raman, 2001 p. 7), which may account for some of the reluctance

on the part of principals to push ahead with such reforms. In any case, autonomous status is not necessarily the magic bullet for it has been said that some colleges are autonomous only in name.

Revisions to the syllabus must be agreed by all the colleges teaching the course and this can prove problematic, especially if existing staff have limited expertise in the new topic areas and if new teaching resources need to be provided. The standardized syllabus taught to large numbers of students over large numbers of years also means that it becomes worthwhile for entrepreneurial students and teachers to write and publish “guide books” which cover all the topics for a particular course. These books are frequently available from university copy shops or markets and are, essentially, the key ideas from the course and its texts, presented in a simplified format and frequently (though not always) without attribution of where the original concepts came from. In addition, as the intention is to provide students from any college with the knowledge that they require in order to be able to answer the examination, they often focus on a conservative, uncritical approach to the subject. Here is how an influential Indian academic recently summarised Indian universities scene:

“Higher education in India is fragmented, scattered and takes place in nearly 16,000 institutions called affiliated colleges, many of which are tiny and a trace better than higher secondary schools. They do not have libraries worth the name. Most of them have a faculty strength varying from 100 to 200 and the number of faculty with doctoral qualification is pitifully low or nil in many cases. These institutions of higher learning perform only classroom teaching, preparing students for examinations like tutorial colleges. The affiliating system, which dominates the Indian scene, has long been given up even in the country of its origin. It does not exist anywhere in the world barring India, Pakistan and Bangladesh” (Kulandaiswamy, 2005).

Disciplining Measures

Drawing on Foucault’s notions of disciplining, power and knowledge, we argue that these two aspects of the Indian learner’s educational experience have a considerable impact on the expectations that they will have when Indian learners study MIS outside their own country. One of the key aspects of any educational programme is determining “How do we know what you know?”. The previous sections illustrate the mechanisms that help shape the answer to this question for the Indian learner. Thus, the way that support is provided to the students, whether it be through coaching to enter the university or the extensive availability of academics, is illustrative of the mechanisms that students draw upon to help them understand what is expected of them in their educational. Similarly, the institutional arrangements of many of the Indian universities, with their centralized syllabi and standard examinations, give a specific status to those centralized bodies that determine the form of teaching and assessment (and hence, also the wider resources like unofficial course guides) that reinforce both what and the way that they learn.

The lifting out of certain knowledge claims (or legitimized practices) and their re-embedding in different contexts highlights how contingent such claims about knowledge are upon the local context in which they are produced and reproduced (Faubion, 2002 p. xx). Further, our analysis of the Indian context highlights that what is viewed as relevant knowledge is inextricably interlinked to the apparatus of power in specific locales. For example what is considered legitimate knowledge (and learning) is tied to access, centralized syllabi and standard examinations—which are in turn supported by revision notes, coaching, etc. In turn these are held in place by a certain accepted relationship between teacher and student as well as between colleges and universities. It is this lack of understanding about the operation of the apparatus of power that exist in other contexts that means the knowledge claims and learning practices of Indian students can not be sustained in contexts such as the UK and USA. The institutional arrangements, the salaries and the limited autonomy of Indian academics is in stark contrast to those lecturing in UK universities. The practices of UK academics nowadays are shaped by the research assessment exercise (RAE) and the quality assurance agency (QAA) as well as disciplinary and departmental customs and practices and the individual academic’s belief about what is viewed as being important to present to students within a particular domain of study and how it is taught is also important. In the UK, for example, there has been a considerable focus on teaching and learning activities, with compulsory training for all new lecturers. Knowledge claims and legitimate learning practices in countries like India rest upon different power/knowledge relations to those in countries like the UK. Our Foucauldian analysis suggests that without recognizing the inseparability of power and knowledge MIS postgraduate programmes that admit large numbers of international students such as Indians will not sufficiently attend to the learning requirements of such students.

Given these strong determinants on the educational experiences of the Indian learner it is unsurprising, therefore, that when the learner moves to a different educational arena (such as the UK), with its own distinctive, disciplining characteristics issues and problems arise. These are discussed in more detail in the next section.

MIS Programmes and the Indian learner

This section considers the implications of our analysis for Indian students enrolling in MIS postgraduate programmes in the UK. Although our data reports on the experiences of the Indian learner, coming to study in the UK, the analysis presented in this section also applies to any learner whose undergraduate studies were in one country with one set of educational norms and who then goes on to postgraduate study in another country with different norms and expectations.

Globalization and the Contestability of Knowledge Claims

The increasing globalization of education has exposed contrasting beliefs about what are considered to be appropriate academic practices. The Indian education system, for example, with its specific role for coaching and other forms of support, together with its often centralized syllabi suggest that there is a definitive truth that is being sought and assessed. This notion appears to be deeply embedded in the Indian education system prior to and throughout the university education, hence providing an ongoing disciplining effect. This was evident, for example, in the ‘coaching’ that took place during the lectures described above. In contrast, in other countries MIS programmes often require students to embark upon very different approaches to learning, with some modules not offering any definitive answers to the topics introduced. In other courses, there may be contrasting beliefs about the domain of study (e.g. data flow modeling) and students are to draw on their own understanding of the literature to argue their position on a particular topic. In this sense, as a consequence of the disembedding of truth claims that emerge in specific educational contexts and their re-embedding in different educational contexts (Giddens, 1991), we suggest that many international students are unfamiliar with the claims and the mechanisms and apparatus that support these claims, when they come to study in the UK and USA (Foucault, 1979). Below we will suggest that MIS postgraduate programmes represent especially challenging contexts for such disembedding and re-embedding of international students.

The Diversity of Management Information Systems

According to the ACM and AIS MSIS curriculum: “Students choosing to attend MIS programmes typically come from a wide variety of disciplinary backgrounds most notably from computer science, general business degrees, humanities, social science and engineering” (ACM and AIS, 1999 p. 5). The Indian students in our focus groups in the UK, however, typically came from a limited range of disciplinary backgrounds, particularly engineering, computer science and business / commerce. Further, some of these students are new graduates while others have a number of years work experience. Such a broad student population represents a range of divergent approaches to knowledge and knowledge claims. This is in contrast with other subjects that usually require students to have a similar background to the postgraduate subject to be studied. Further, for MIS postgraduate degrees, due to the varied technical, managerial and organizational subjects that they typically incorporate, international students are exposed to very different kinds of educational practices. The model IS curriculum proposed by a joint ACM and AIS working group (1999) makes clear that IS programmes should combine technical and management modules. Further, the model curriculum claims to be compatible with MIS programmes offered by departments across a university (ACM and AIS, 1999).

Management modules suggested in the AIS curriculum include marketing and accounting and finance, that are informed by positivistic underpinnings, alongside courses on organisational behaviour that typically adopt interpretive / constructionist approaches. Other, more contested subjects (like strategy, IT management or systems analysis and design) might be taught by faculty with conflicting beliefs about what students should know and how they should be able to demonstrate their knowledge. For example, on the same module one faculty member may introduce students to the techniques of data flow modeling, while another faculty member may point to the inherent weaknesses of representing data this way.

In their discussion of the regimes of truth of MISQ, Introna & Whittaker (2004) argue that the knowledge claims of academics are in part established and maintained through the journals that their work is published in, the conferences they present to and more generally the community they associate themselves with. This is true for all the academics that contribute to typical MIS programmes. Thus, we contend that academics are central to the general functioning of an apparatus of truth as they are “not the bearer of universal truth” (Foucault, 1979 p. 131). Further, we suggest that each of these different claims for what makes up knowledge constitutes the subjectivity of students, just as they constitute the subjectivity of the academics themselves (Faubion, 2002: xix). However, how is such a socially constructed view of knowledge to be presented to our international students?

How Could MIS Postgraduate Programmes Respond to these Challenges?

Now that we have established the particularly challenging context that MIS postgraduate programmes present to international students, such as Indians, we wish to review a number of related concerns. If we follow Foucault’s argument that “the knowable individual has been the individual caught in relations of power as that creature who is to be trained, corrected, supervised and controlled” (1979, p. 136) then this implies that first, we need to be clear about the nature of the knowledge claims that MIS programmes introduce to students and second to think about how MIS programmes go about ‘training’, ‘correcting’, ‘supervising’ and ‘controlling’ students in relation to such claims. These issues are discussed in relation to the questions of access to MIS truth claims, assessment and plagiarism. Reflexively, we note that making such prescriptions is not necessarily compatible with the spirit of the Foucauldian project.

Access to MIS Truth Claims

One of the key features of Indian education is the degree of access that students are provided to faculty members. As the previous section indicated, the institutions we visited all operated an ‘extended’ open-door policy. Staff were not only available in their offices but also on their mobile phones and in some cases in their homes. This extended access provided a mechanism that allowed students insights into the truth claims of their Indian faculty (Foucault, 1979). The same degree of access does not typically occur in UK and USA universities. Such restrictions to one-to-one discussion may deprive Indian students’ access to the training and correction that they were familiar with in their own context. Due to the diversity of truth claims that comprise MIS programmes, it is especially important to ensure that in-depth forms of access are made available to such students. This may be through the establishment of learning groups and drop-in sessions with doctoral students, as well as with the stipulated office hours of the MIS faculty. Indeed, for some learning theorists, access to observe, question and imitate those that are more experienced (the masters) is crucial for newcomers to a particular academic community to be able to learn (Lave and Wenger, 1993).

A related access issue pertains to the ways in which MIS faculty introduce reading lists to students. Indian students are used to having textbooks (usually one) that are set by a University Board. Students know these specified books are to be memorized for them to correctly answer exam questions. As such, by specifying a particular book as being the recommended text for a given subject, the University Board are negotiating and identifying which knowledge is considered to be legitimate for a given subject area and as such the topics and specific content that is taught and importantly examined. In this sense, the certainty of what subject knowledge is considered to be legitimate by the Exam Board and in turn the faculty is provided to Indian students.

For MIS programmes, some modules such as Programming and Strategy may have textbooks. Recommended books will broadly indicate what are considered to be legitimate knowledge of a given subject. In such cases Indian students will feel more comfortable in demonstrating that they have mastered the subject as it is sufficiently similar to their Indian practices. Other modules may not use textbooks, but instead require students to select articles and books from a long reading list. In other words, students are required to evaluate the different knowledge claims surrounding a subject area, as well as determine what are considered to be legitimate ways of demonstrating that they have mastered a subject. This is in contrast to what students are familiar with in India and consequently they may find it difficult to respond to the requirements of such MIS modules. This highlights that reading lists themselves are mechanisms of power, which without guidance and explanation are likely to be unable to be usefully appropriated by Indian students in their practice.

We suggest that for Indian learners to gain access to the differing truth claims of interdisciplinary MIS faculty and their related approaches to further reading, it will require considerable reflection on behalf of MIS faculty as to their own truth claims and those of the other staff who contribute to the MIS programme so as to be able to clearly articulate to students how and why their claims differ. This self reflection and questioning is something that we suggest is unlikely to have taken place and as these claims to knowledge constitute their legitimacy, are likely to be defended rather than exposed (Foucault, 1979 p. 132; Introna and Whittaker, 2004).

Assessment

In relation to assessment, where there is no agreed knowledge of a given subject area such as in Organisational Behaviour modules, we suggest this requires assignments to be scheduled only once students have had sufficient time to familiarize themselves with alternate knowledge claims. These knowledge claims relate to the subject matter itself and how to demonstrate that they have understood the subject matter. In other words, time needs to be provided for Indian students to be disciplined and normalized in relation to the different modules that they are to be assessed in. Without this, students will not be recognized as following the standards and representing the beliefs that underpin specific modules. As we have already established, many of the knowledge claims about what is considered to be legitimate knowledge among MIS modules are contrasting. Being sufficiently chameleon-like to be able to demonstrate that they have mastered a specific subject so as to be rewarded with high marks across the range of MIS modules can be a significant challenge for the Indian student (Foucault, 1979). Consequently, we suggest that when the knowledge claims and the legitimate practices in learning/studying are significantly different to those in their home country, sufficient time should be allocated to ensure that students understand what is being asked of them. Past exam and essay questions should also be released early so they can be used by students and faculty as a basis for the discussion about the subject content of specific modules. Doing this opens up the mechanisms and apparatus' that reproduce the truth claims of particular disciplines. This opening up may assist students in making the adjustment from, for example, a coaching model to one based on argumentation.

Plagiarism

A number of studies have highlighted how students in non-western contexts do not have the same assumptions about intellectual property and this is given as one of the key explanations for why some international students plagiarize when they are studying in the UK (Carroll, 2002; Hayes and Introna, 2005a). Rote approaches to learning and assessment and the adherence to one key textbook for each module may mean that students are not familiar with the expectations for referencing. Indeed such adherence to assessing and rewarding those students that can best match the requirements of the University Board and the knowledge claims they deem to be legitimate about a given subject, may leave students in a position where they feel the closer the match between their answer and the model answer (the textbook quite often) the better they can demonstrate they have understood the subject matter. In contrast, when studying in the UK and USA, as students are expected to use multiple sources, Indian students may not have the understanding or the associated practices to be able to conform to the requirement that they reference any ideas and words that are drawn upon directly or indirectly.

Further, due to the diversity of the typical MIS curriculum, referencing requirements are likely to differ. For example on a Finance module it is likely that students will be given specific datasets to analyse and work through and as such the referencing requirements will not be onerous, on some computing modules they may be required to develop some code which will not require extensive referencing. Indeed, on some computing modules they may be taught to value the concept of 'reuse' when being introduced to object orientated design. In contrast modules such as Organizational Behaviour and Strategy are likely to involve considerable literature searching and referencing in defense of the particular arguments a student presents. Consequently, students are faced with differing standards and expectations across the modules on an MIS programme. This is likely to limit the degree to which they become disciplined in referencing. With students trying to familiarize themselves with the varying knowledge claims that make up the different modules on an MIS curriculum, as well as adjust to new ways of demonstrating (legitimately) that they have mastered the subject, this uncertainty may also lead to plagiarism. Plagiarism from this perspective can be further understood as being inextricably interlinked with the limited understandings, experience and familiarity of power/knowledge relations in different educational contexts. This is extenuated with regards to MIS programmes due to the differing and sometimes conflicting knowledge claims that they comprise of.

Future Research

The next stages of our research project will provide us with an opportunity to explore the concepts we have identified in this work in relation to the experiences of students as they study in the UK. This will enable us to understand better the mechanisms that Indian students adopt to make the transition to succeeding in the UK, the extent to which the similarities between Indian higher education and the UK system simplify this process (i.e., in comparison to other international students whose education systems are not based on the UK model) and will allow us to experiment with particular interventions and specialized orientation sessions that will address some of the issues we have identified.

Conclusion

This paper presents a detailed, empirical study of the Indian learner. It presents the results of fieldwork to study the context of the Indian learner including focus groups, interviews with students and academics and visits to Indian universities and campuses. Drawing on this fieldwork, the paper has highlighted some of the challenges that the globalization of postgraduate education faces as a consequence of the disembedding and re-embedding of knowledge from locale to locale. We have suggested that the often self-contradictory nature of MIS programmes further compounds these difficulties due to the diverse and sometimes contradictory nature of the knowledge claims that comprise a typical MIS programme. We have argued that with the increased numbers of international students studying MIS programmes we need to explicitly recognize the diverse relationships between knowledge and power that exist and reflect upon our own knowledge claims and engage in an open debate with students as to the contrasting claims that make up their MIS programme. Finally we suggest that access to knowledge claims is crucial if students are to be able to move from the periphery as newcomers to becoming full participants of MIS programmes. Of course, this also requires the 'masters', the academics, to be reflexive about their own knowledge claims, as Foucault (1979) argues in relation to the fundamental political problem of intellectuals which: "is not to criticize the ideological contents supposedly linked to science, or to ensure that his own scientific practice is accompanied by a correct ideology, but that of ascertaining the possibility of constituting a new politics of truth" (pp. 131-132).

References

- ACM and AIS, "MSIS 2000: Model Curriculum and Guidelines for Graduate Degree Programs in Information Systems," 1999. Archived at <http://www.aisnet.org/Curriculum/index.htm#MSIS%202002/>
- Agar, M. H., *The Professional Stranger: An Informal Introduction to Ethnography*, Academic press, London, 1996.
- Ashworth, P.; Bannister, P.; and Thorne, P., "Guilty in whose eyes: University students perception of cheating and plagiarism," *Studies in Higher Education*, Volume 22, Number 2, 1997. 187-203.
- Bond, M., "The psychology of the Chinese people," *The psychology of the Chinese people*, Bond, M. (Ed.), Oxford University Press, Oxford, 1986
- Brooke, C., "What does it mean to be 'critical' in IS research," *Journal of Information Technology*, Volume 17, Number 2, 2002. 49-57.
- Carroll, J., "Suggestions for teaching international students more effectively," *Learning and Teaching Briefing Paper Series*, Oxford Brookes University, 2002. Archived at http://www.brookes.ac.uk/services/ocsd/2_learnth/briefing_papers/international_students.pdf
- Carroll, J., and Appleton, J., "Plagiarism: A good practice guide," *Learning and Teaching Briefing paper series*, Oxford Brookes University, 2001. Archived at www.brookes.ac.uk/services/ocsd
- Chakrawarti, S., "Them vs IIM," *Sunday Times of India*, 20 November, 2005.
- Chitnis, S., "Higher Education in India - Seriously Challenged," *International Higher Education*, 2002. Archived at http://www.bc.edu/bc_org/avp/soe/cihe/newsletter/News27/text011.htm
- Ciborra, C. U., *The labyrinths of information: Challenging the wisdom of systems*, Oxford University Press, Oxford, 2002.
- Department of School Education and Literacy "Initiatives" 2006 Archived at http://education.nic.in/eleedu_1.asp
- Department of Secondary and Higher Education "Higher Education" 2006 Archived at <http://www.education.nic.in/higedu.asp>
- Faubion, J., *Introduction to the essential works of Michel Foucault: 1954-1984 v. 3*, Penguin Books, London, 2002.

- Foucault, M., "Truth and Power," In *Power/Knowledge: Selected interviews and other writings*, C. Gordon (Ed.), Pantheon Books, New York, 1977,
- Foucault, M., *Discipline and punish*, Vintage books, New York, 1979.
- George, K. , and Raman, R., "Changes in Indian Higher Education - an Insider's View," Centre for Higher Education Transformation, South Africa, 2001. Archived at <http://www.chet.org.za/papers/India.doc>
- Giddens, A., *Modernity and self identity*, Polity Press, Cambridge, 1991.
- Guardian, "1 in 40 to IIT," 2006. Archived at <http://education.guardian.co.uk/higher/worldwide/story/0,,1683695,00.html>
- Gupta, A., "Divided Government and Private Higher Education Growth in India," *International Higher Education*, 2004. Archived at http://www.bc.edu/bc_org/avp/soe/cihe/newsletter/News35/text008.htm
- Hayes, N. , and Introna, L., "Cultural values, plagiarism, and fairness: when plagiarism gets in the way of learning," *Ethics and Behaviour*, Volume 15, Number 3, 2005a. 213-231.
- Hayes, N. , and Introna, L., "Systems for the production of plagiarists? The implications arising from the use of plagiarism detection systems in UK universities for asian learners," *Journal of Academic Ethics*, Volume 3, Number 1, 2005b. 55-73.
- Heredia, R., "Jesuit Higher Education in India Today: Institutionalizing Our Charisma in the Affiliating University," *International Higher Education*, 1996. Archived at http://www.bc.edu/bc_org/avp/soe/cihe/newsletter/News03/textcy1.html
- Introna, L. D. , and Whittaker, L., "Truth, journals and politics: The case of MIS Quarterly," In *Information systems research: Relevant theory and informed practice*, B. Kaplan, Duane P. Truex III, D. Wastell, A. T. Wood-Harper and J. I. DeGross (Ed.), Kluwer, Boston, 2004, pp. 103-120.
- Kapu, D. , and Mehta, P., "Indian Higher Education Reform: From Half-Baked Socialism to Half-Baked Capitalism," CID Working paper 108, Centre for International Development, Harvard University, 2004. Archived at <http://www.cid.harvard.edu/cidwp/108.htm>
- Kulandaiswamy, V., "Reconstruction of higher education in India," *The Hindu*, 18 May, 2005.
- Lave, J. , and Wenger, E., *Situated learning: legitimate peripheral participation*, Cambridge University Press, Cambridge, 1993.
- Lee, A. S. , and Baskerville, R. L., "Generalising generalizability in information systems research," *Information Systems Research*, Volume 14, Number 3, 2003. 221-243.
- McGrath, K., "ICTs Supporting Targetmania: How the UK Health Sector is Trying to Modernise," *Proceedings of the Organizational information systems in the context of globalization*, Athens, Greece, 2003, pp. 19-34.
- Mol, A. , and Law, J., "Complexities: An introduction," In *Complexities: Social studies of knowledge practices*, J. Law and A. Mol (Ed.), Duke University Press, Durham, 2002, pp. 1-22.
- O'Donoghue, T., "Malaysian Chinese student's perceptions of what is necessary for their academic success in Australia: A case study at one university," *Journal of Further and Higher Education*, Volume 20, Number 2, 1996. 67-80.
- Pennycook, A., "Borrowing others' words: text, ownership, memory and plagiarism," *TESOL quarterly*, Volume 30, Number 2, 1996. 210-230.
- Rediff "Why the IIT-JEE pattern was changed" 2005 Archived at <http://www.rediff.com/money/2005/oct/11inter.htm>
- Suchman, L. A., *Plans and situated actions: The problem of human-machine communication*, Cambridge University Press, Cambridge, 1987.
- The Hindu, "Change in IIT test draws flak; academics say rural students will be hit," 2005. Archived at <http://www.hindu.com/2005/09/14/stories/2005091420830400.htm>
- Tilak, J., "Privatization of Higher Education in India," *International Higher Education*, 2002. Archived at http://www.bc.edu/bc_org/avp/soe/cihe/newsletter/News29/text007.htm
- Timm, A., "The Production of Ambition: The Making of a Baltic Business Elite," Unpublished PhD Thesis, LSE, 2003.
- Turner, Y., "Chinese students: teaching, learning and equality in UK higher education," *Higher Education Equal Opportunities Network*, 13 2000. Archived at <http://www.worc.ac.uk/services/equalopps/HEEON/newsonline.htm#Yvonne%27s>
- UKCOSA, "Higher Education Statistics (2002/2003)," The Council for International Education, 2004. Archived at <http://www.ukcosa.org.uk/pages/hestats.htm>
- Wittgenstein, L., *Philosophical investigations*, Basil Blackwell, Oxford, 1956.
- Zuboff, S., *In the age of the smart machine: The future of work and power*, Basic Books, New York, 1988.